Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A system for synchronizing data streams, the system comprising:

a) an input source for a CLK and a SYNC stream;

b) a SYNC decoder for receiving said CLK and SYNC streams and decoding said SYNC stream packets into a qualified system time events;

c) a plurality of SYNC receivers, for receiving said qualified system time events and converting said qualified system time events to one or more derived time events; and

d) output interface for transmitting said derived time events.

2. (Original) The system of claim 1 wherein said input source comprises one or more master locks.

3. (Previously presented) The system of claim 1 wherein said input source comprises a locked oscillator that outputs said CLK stream to said SYNC decoder, wherein the locked oscillator maintains a CLK stream even when a source of a CLK stream is removed.

4. (Previously presented) The system of claim 1 wherein said input source ~~is coupled to~~ receives said CLK stream from an external master reference and outputs said CLK stream to said SYNC decoder.

5. (Previously presented) The system of claim 1 wherein each of said SYNC receivers comprises a flywheeling counter, wherein the derived time events are dependent on the value of each flywheeling counter.

6. (Original) The system of claim 1 wherein said SYNC stream comprises a plurality of packets, each packet comprising: a high level logic bit, a packet start bit, a group of flag bits, a low bit, a group of checkword bits; and a take bit.

7. (Previously presented) The system of claim 6, wherein the flag bits, low bit and checkword bits repeat within each packet.

8. (Original) A method for synchronizing data streams comprising the steps of:

a) receiving a CLK signal;

b) receiving a SYNC stream;

c) decoding said SYNC stream into a plurality of qualified system time events, said decoding utilizing said CLK signal;

d) transmitting each of said plurality of qualified system time events to one or more receivers;

e) creating and synchronizing derived time events contained in said qualified system time events packets within said receivers; and

f) transmitting said derived time events.

9. (Original) A method for synchronizing data streams, said method comprising:

a) receiving a CLK stream and a SYNC stream;

b) decoding said SYNC stream into qualified system time events;

c) transmitting said qualified system time events to a plurality of SYNC receivers,

d) converting of said qualified system time events by said SYNC receivers to one or more derived time events; and

e) transmitting said derived time events to one or more components.

10. (Original) The method of claim 9 wherein said CLK stream is received from one or more master locks.

11. (Original) The method of claim 10 wherein said one or more master locks receive said CLK stream from an external master reference.

12. (Original) The method of claim 9 wherein said CLK stream is received from a locked oscillator.

13. (Original) The method of claim 9 wherein said converting of said SYNC packets utilizes at least one flywheeling counter.

14-16. (Canceled)

17. (Previously presented) A system for synchronizing data streams, comprising:

means for receiving a CLK signal;

means for receiving a SYNC stream;

means for decoding said SYNC stream into a plurality of qualified system time events, said decoding utilizing said CLK signal;

means for transmitting each of said plurality of qualified system time events to one or more receivers;

means for creating and synchronizing derived time events contained in said qualified system time events packets within said receivers; and

means for transmitting said derived time events.

18. (New) A system for synchronizing data streams, the system comprising:

a) an input source for a clock and a synchronization stream;

b) a synchronization decoder for receiving said clock and synchronization streams and decoding synchronization stream packets in said synchronization streams into qualified system time events;

c) a plurality of synchronization receivers, for receiving said qualified system time events and converting said qualified system time events to one or more derived time events; and

d) an output interface for transmitting said derived time events.

19. (New) The system of claim 18 wherein a periodicity of the derived time events has a an integer or a complex relationship to the qualified system time events.

20. (New) The system of claim 18 wherein the derived time events of each synchronization receiver are dependent on a value of a counter included in the receiver.

21. (New) The system of claim 18 wherein said input source comprises one or more master locks.

22. (New) The system of claim 18 wherein said input source comprises a locked oscillator that outputs said CLK stream to said SYNC decoder, wherein the locked oscillator maintains a CLK stream even when a source of a CLK stream is removed.

23. (New) The system of claim 18 wherein each of said SYNC receivers comprises a flywheeling counter, wherein the derived time events are dependent on the value of each flywheeling counter.